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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,075	01/08/2004	Holger Hoppe	543822003100	5426

25227 7590 07/13/2005

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EXAMINER

CHAN, EMILY Y

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AR

Office Action Summary	Application No.	Applicant(s)	
	10/753,075	HOPPE, HOLGER	
	Examiner	Art Unit	
	Emily Y. Chan	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/30/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 6, 9 - 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Isaac et al US Patent No. 5,742, 170.

With respect to claims 1-2, 9-10 and 15, Isaac et al ('170) disclose a method and a semiconductor test socket or adapter device for carrying a semiconductor device (11) to be tested (see Figs. 1-8) as claimed, comprising:

Connecting a socket or adapter device (23) to a testing system (see ABSTRACT, line 4 "semiconductor test circuitry"), wherein at least one connection pin (44) is connected to a corresponding contact device (see Fig. 5, contact block 54) by solderless surface mounting (see ABSTRACT " solderless multiple contact assembly");

Loading the socket or adapter device (23) with a semiconductor to be tested.

Isaac et al ('170) further disclose that the connection pin (44) extends from a lower surface of the socket or adapter device (23) in a downward direction and the end section (49) of the connection pin (44) has a shape bent back in an upward direction.

With respect to claim 4, Isaac et al ('170) disclose that the contact pin (44) is made a flexible material (see Col. 4, line 20 "solderless flexible contact sets 44).

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With respect to claim 6, Isaac et al ('170) disclose that at least one section (49) of the connection pin (44) has an arcuate or bent shape.

With respect to claim 7, Isaac et al ('170) disclose that the device comprising the contact device (54) is a circuit board (43) connected to a testing apparatus (see Fig. 1).

With respect to claim 8, Isaac et al ('170) disclose that the device (43) comprising the contact device is a testing apparatus (see Fig. 1.)

With respect to claims 11-13, Isaac et al ('170) disclose a screw connection (46) (see Col. 4, lines 25-30) and clamping connection (solderless contact) provided such that the connection pin (44) is pressed against the contact device (54).

With respect to claim 14, Isaac et al ('170) disclose that the socket or adapter device comprises a plurality of connection pins (see Co. 4, lines 20 " a group of four solderless flexible contact sets 44"), each being connected to the respectively corresponding contact device without soldering.

Therefore, Isaac et al ('170) anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isaac et al ('170) in view of Ptiff et al US patent No. 6,124,720.

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Isaac et al ('170) do not disclose that the socket or adapter device (23) is a burn-in testing adapter and the connection pin (44) is metal alloy including copper and/or beryllium.

Ptaff et al ('720) disclose a burn -in test sockets or adapter device for surface mount device packages (see Figs 1-4, 10) comprising at least one connection pin (11) configured to be connected to a corresponding contact device (contact pad 41) (see Fig. 3) of a circuit board 40. Specifically, Ptaff et al ('720) disclose that their connection pin (11) is made of a flexible or resilient material such as gold-plated steel or alloys such as beryllium-copper alloy (see Col. 3, lines 16-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to incorporate the teaching of Ptaff et al ('720) into Isaac et al ('170) 's socket or adapter device so that Isaac et al ('170)'s socket can be used as a burn -in testing adapter because Ptaff et al ('720) disclosed that their socket may be used for test and burn-in of extremely high frequency device without introducing signal distortion problem (see Col. 2, lines 27-30).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McDevitt Jr. US Patent No. 5,199,889 disclose a leadless grid array socket or adapter device (see Figs. 1-2) comprising a socket (2), a printed circuit board (5) and a c the connection pin (3). McDevitt Jr ('889) exclusively teaches that at least one section of the connection pin (3) has a bent shape (see Fig. 2).

Kataka et al US Patent No. 6,019,613 disclose a connector for printed circuit board (see Fig. 1) comprising a connection pin (22) with bent shape.

Response to Amendment

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Y. Chan whose telephone number is 571-272-1956. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EC
7-9-05


VINH NGUYEN
PRIMARY EXAMINER
A.U. 2829
07/11/05